

## ABSTRACT

An object of the present invention is to provide a hollow fiber membrane with enhanced phosphorus-removing performance without impairing antithrombogenicity in order to inhibit *in vivo* accumulation of phosphate ions in living body that might cause bone metabolism disorders.

The present inventors have found that a hollow fiber membrane having a specific membrane structure and a specific membrane composition possesses a very useful range for inner surface charges of the membrane. More particularly, the inventors have discovered that the above object can be achieved in a limited range in which the zeta potential on the inner surface of a hollow fiber membrane measured under given certain conditions is greater than -3.0 mV but less than 0 mV. This finding has led to the completion of the present invention.